IN THE CLAIMS:

Please cancel claims 1-13 without prejudice or disclaimer and insert new claims as shown below.

1-13 (cancel)

14. (New) A method for recycling a silver stained DNA detection chip having bound nanoparticles, said method comprising the steps of:

(a) providing an etching solution;

(b) contacting the chip with the etching solution for a time sufficient to remove the silver stain; and

(c) washing the etching solution away from the chip so as to produce a recycled chip for subsequent reuse in a nucleic acid hybridization assay.

15. (New) The method according to claim 14 wherein the etching solution is a cyanide etching solution.

16. (New) The method according to claim 15 wherein the cyanide etching solution comprises:

0.01 M to 0.5 M $Na_2S_2O_3$;

0.1 M to 2 M KOH;

0.001 M to 0.1 M $K_3Fe(CN)_6$; and

0.0001 M to 0.005 M $K_4Fe(CN)_6$.

17. (New) The method of claim 15 wherein the cyanide etching solution comprises:

0.1 M $Na_2S_2O_3$;

1.0 M KOH;

0.01 M $K_3Fe(CN)_6$; and

0.001 M $K_4Fe(CN)_6$.

18. (New) The method of claim 15 wherein the cyanide etching solution comprises:

0.05 M to 0.5 M KCN; and

0.1 M to 2 M KOH.

19. (New) The method of claim 15 wherein the cyanide etching solution comprises:

0.1 M KCN; and

1.0 M KOH.

20. (New) The method of claims 16 or 18 wherein the cyanide etching solution is applied by dipping the chip in the cyanide etching solution.

21. (New) The method of claims 16 or 18 wherein the cyanide etching solution is applied by spraying the chip with the cyanide etching solution.

22. (New) The method of claims 16 or 18 wherein the cyanide etching solution is removed by washing with water.

23. (New) The method of claims 16 or 18 wherein the cyanide etching solution is applied for between about 1 second and about 10 minutes.

24. (New) The method of claim 14 wherein the silver stained DNA chip has bound nanoparticles.

25. (New) The method of claim 24 wherein the nanoparticles catalyze silver reduction.

26. (New) The method of claim 24 wherein the nanoparticles comprise gold or silver.

27. (New) A method for recycling a silver stained DNA detection chip having bound nanoparticles for subsequent reuse in a nucleic acid hybridization assay, said

method comprising subjecting the detection chip to ultrasound waves for a time sufficient to remove the silver stain and to produce a recycled chip for subsequent reuse in a nucleic acid hybridization assay.

28. (New) The method of claim 27, wherein the chip is subjected to ultrasound waves by submersing the chip in a sonicator.

29. (New) The method of claim 28 wherein the chip is submersed in the sonicator for between about 3 minutes and about 5 minutes.